

Gentlemen,

In regard to the NPRM on BPL, I do not understand Appendix C, Para. 1.6. As written, only vertical polarized emissions from a powerline device on power lines are measured below 30 MHz at 1 meter elevation. Horizontal polarized emissions are not measured. Since many antenna systems are horizontally polarized and at elevations of 10 to 20 meters also, this appears to be totally inadequate. If this wording was the intention, I then I disagree with the intention.

In Part 15 emissions standards, the measurement bandwidth of the test receiver is not clearly called out below 1 GHz. It can be inferred from other paragraphs, I believe. It would be useful to amend Part 15 to include this information clearly. A 1 MHz measurement bandwidth would be preferred. Already devices such as switchmode power converters use "spreading" and "randomization" to allow them to emit the same power, but pass the emission limits measured in a narrow bandwidth.

Part 15 emission standards, in general, are totally inadequate to control interference between licensed and unlicensed services. Emissions at Part 15 limits are at least 60 dB greater than atmospheric noise levels. Specifying frequency bands that are little used or will not be used by licensed services as a target for relaxed emission standards is a much better approach.

Thank you.

John E. Matz PE

MSEE, Northwestern University, 1973

Amateur Radio Station KB9II, since 1963